

February/FY06

**FORT SAM HOUSTON
TEXAS**

**Army Defense Environmental
Restoration Program
Installation Action Plan**

FINAL 8 May 2006

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Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Installation Cleanup Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

In an effort to coordinate planning information between the restoration manager, US Army Environmental Center (USAEC), Fort Sam Houston, Installation Management Agency-Southwest Regional Office (IMA-SWRO), executing agencies, and regulatory agencies, an IAP was completed. The IAP is used to track requirements, schedules, and budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is therefore subject to change.

The following agencies contributed to the formulation and completion of this Installation Action Plan during a planning workshop held on 7 February 2006:

Company/Installation/Branch

Engineering & Environment Inc, for USAEC
Fort Sam Houston
IMA-SWRO
TCEQ
TCEQ - Region 13
USACE – Tulsa District
US Army Environmental Center

Acronyms & Abbreviations

| | |
|---------------------|---|
| ACAD | Academy of Health Sciences |
| AEDB-R | Army Environmental Database - Restoration |
| AEHA | Army Environmental Hygiene Agency |
| AFB | Air Force Base |
| AMEDDC&S | US Army Medical Department Center and School |
| APAR | Affected Property Assessment Report |
| BAMC | Brooke Army Medical Center |
| BRAC | Base Realignment and Closure |
| BX | Base Exchange |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| COC | Contaminant of Concern |
| CTC | Cost-to-Complete |
| DD | Decision Document |
| DERP | Defense Environmental Restoration Program |
| DOD | Department of Defense |
| EOD | Explosive Ordnance Disposal |
| EPA | Environmental Protection Agency |
| ER,A | Environmental Restoration, Army |
| FUDS | Formerly Used Defense Site |
| FS | Feasibility Study |
| FSH | Fort Sam Houston |
| FY | Fiscal Year |
| IAP | Installation Action Plan |
| IC | Institutional Controls |
| IMA-SWRO | Installation Management Agency-Southwest Regional Office |
| IRA | Interim Remedial Action |
| IRP | Installation Restoration Program |
| K | Thousand |
| LTM | Long-term Management |
| LUC | Land Use Controls |
| MC | Munitions Constituent |
| MCL | Maximum Contaminant Level |
| MEDCOM | US Army Medical Command |
| MEC | Munitions Explosive Constituent |
| mm | Millimeter |
| MMRP | Military Munitions Response Program |
| MW | Monitoring Well |
| NE | Not Evaluated |
| NEPA | National Environmental Protection Act |
| NFA | No further action |
| NOD | Notice of Deficiency |
| NOE | Notice of Enforcement |
| NOR | Notice of Registration |
| NOV | Notice of Violation |
| NPL | National Priorities List |

Acronyms & Abbreviations

| | |
|----------------|--|
| O&M | Operation & Maintenance |
| PA | Preliminary Assessment |
| PCB | Polychlorinated Biphenyls |
| PCL | Protective Concentration Level |
| POL | Petroleum, Oil and Lubricants |
| PX | Post Exchange |
| RA | Remedial Action |
| RAB | Restoration Advisory Board |
| RA(C) | Remedial Action (Construction) |
| RA(O) | Remedial Action (Operation) |
| RAC | Risk Assessment Code |
| RAP | Response Action Plan |
| RC | Response Complete |
| RCRA | Resource Conservation and Recovery Act |
| RD | Remedial Design |
| REM | Removal |
| RI | Remedial Investigation |
| RIP | Remedy-in-place |
| ROD | Record of Decision |
| RRSE | Relative Risk Site Evaluation |
| SI | Site Inspection |
| SVOC | Semi-Volatile Organic Compounds |
| TAPP | Technical Assistance for Public Participation |
| TCEQ | Texas Commission on Environmental Quality (formerly TNRCC) |
| TDH | Texas Department of Health |
| TNRCC | Texas Natural Resource Conservation Commission (now TCEQ) |
| TPH | Total Petroleum Hydrocarbons |
| TRC | Technical Review Committee |
| TRRP | Texas Risk Reduction Program |
| TWC | Texas Water Commission |
| TWQ | Texas Water Quality |
| USACE | United States Army Corps of Engineers |
| USAEC | United States Army Environmental Center |
| UST | Underground Storage Tank |
| UXO | Unexploded Ordnance |
| VOCs | Volatile Organic Compounds |
| WWI | World War One |

Installation Information

Installation Locale: Fort Sam Houston (FSH) is located on 3,265 acres of land in Bexar County, Texas. It is situated entirely within the city limits of San Antonio, Texas (metropolitan population 1,300,000 plus), approximately 2.5 miles northeast of the downtown area. The installation is bordered by Rittiman Road on the northern boundary, the Missouri, Kansas and Texas Railroad on the east, Interstate Highway 35 on the south, and Austin Road and Harry Wurzbach Road on the west.

Installation Mission: Since Fort Sam Houston's founding, it has performed five basic missions: headquarters, logistical base, garrison, mobilization and medical support. Presently, FSH serves as an administrative instructional/training and medical center. FSH provides support for six major assigned/attached tenant units, including US Army Medical Command (MEDCOM), US Army Medical Department Center and School (AMEDDC&S), Brooke Army Medical Center (BAMC), US Army Fifth Recruiting Brigade (SW) Regional, Southern Command and Headquarters, Fifth US Army. FSH also has a sub-installation, Camp Bullis, under its command. Camp Bullis is used as a training facility and is located northwest of FSH. FSH supports more than a dozen other smaller services and agencies. Because FSH has provided a variety of missions over the years, it has not seen periods of inactivity.

Lead Organization

Deputy Chief of Staff for Installation Management, Installation Management Agency (IMA)
Southwest Regional Office

Lead Executing Agencies

Investigation Phase Executing Agency: US Army Garrison, Environmental and Natural Resources Office, Fort Sam Houston, Texas

Remedial Design/Action Phase Executing Agency: US Army Corps of Engineers, Tulsa District

Regulatory Participation:

Federal: US Environmental Protection Agency, Region VI

State: Texas Commission on Environmental Quality (TCEQ)

NPL Status:

- Non-NPL
- No Further Remedial Action is planned under Superfund, EPA Letter dated June 16, 1999
- RCRA Hazardous Waste Part A Permit, November 1980
- Termination letter received from the TDH on February 3, 1984
- Notice of Violations (NOV) – 5
- Notice of Deficiency (NOD) – 1
- Interagency Agreements – None
- Federal Facility Agreements – None

RAB/TRC/TAPP Status: No RAB/TRC/TAPP has been established at this time.

Program Summaries:

IRP

Contaminants of Concern: Metals, SVOCs, UXO, POL, Medical Waste

Media of Concern: Soil, Surface Water, Groundwater, Sediment

Estimated Date for RIP/RC: 2006/2011

Funding to Date: (FY87-FY05): \$9,138K

Current Year Funding (FY06): \$154K

Cost-to-Complete (FY07+): \$ 1,780K

MMRP

Contaminants of Concern: MEC/MC, Lead, Arsenic

Media of Concern: Groundwater, Soil

Estimated date for RIP/RC: 2017/2032 (with indefinite LUCs)

Funding to Date (thru FY05): \$0K

Current Year Funding (FY06): \$471K

Cost-to-Complete (FY07+): \$60,435K

Cleanup Program Summary

Installation Historic Activity

Fort Sam Houston (FSH) is an active US Army facility and is not on any proposed closure list. The US Army first came to San Antonio in 1845, occupying rented facilities for military activities. The present installation began in 1870-1875 with the donation of 92 acres of land by the City of San Antonio. Over the years, additional land was acquired to accommodate the expansion of activities on the post. In 1890, the post was designated Fort Sam Houston.

FSH is rich in its contributions to the history of the City of San Antonio, the State of Texas and the US Army. FSH has hosted several people of note, including Apache Chief Geronimo, Theodore Roosevelt and General "Blackjack" Pershing. FSH was also the home of the first Aero Squadron (from which the US Air Force was born) and provided the first training for the development of airborne infantry. Because of these achievements, several properties on the post have been protected through the designation of a National Historic Landmark District.

IRP

- Prior Year Progress: Three IRP sites are active (FTSH-26, 29, 30), that included Landfills 2, 3, 4A, 4B, 5, 6, 7, 8A, 8B, 10 and 12. Landfill 8A under FTSH-26 was officially declassified (October 2004) by the TCEQ based on a technical memorandum submitted by FSH requesting declassification (August 2004). On March 2004, an APAR was submitted to TCEQ for landfills 10 & 12 under FTSH-26 and closure approval was granted by the TCEQ and the sites were deed recorded. On July 2005 an APAR was submitted to TCEQ for landfills 2, 3, 4A, 4B, 5, 6, 7 and 8B and comments were received in October 2005. PBC was awarded in August 2005.
- Future Plan of Action: PBC will allow progression of the sites to RIP/RC by September 2007.

MMRP

- Prior Year Progress: There are 26 identified MMRP sites
- Future Plan of Action: SI will be completed on all of the sites by February 2007.

FORT SAM HOUSTON

Installation Restoration Program

Total AEDB-R IRP Sites/AEDB-R Sites with Response Complete: 26/23

AEDB-R Site Types:

| | |
|--------------------------------------|-----------------------------|
| 1 Building Demolition/Debris Removal | 7 Contaminated Buildings |
| 1 Contaminated Soil Piles | 3 Landfills |
| 4 Maintenance Yards | 1 Pistol Range |
| 2 Radioactive Waste Areas | 5 Underground Storage Tanks |
| 2 Unexploded Munitions/Ordnance | |

Contaminants of Concern: Metals, SVOCs, UXO, POL, Medical Waste

Media of Concern: Soil, Surface Water, Groundwater, Sediment

Completed REM/IRA/RA:

RA at 11 sites: FTSH-06, 14, 15, 19, 20, 21, 22, 23, FTSH-13, Pershing Firing Range and FTSH-26, Landfills, Landfill 10 and 12

Total IRP Funding

| | |
|------------------------------|-----------|
| Prior Years (up to FY05): | \$ 9,138K |
| Current Year Funding (FY06): | \$ 154K |
| Future Requirements (FY07+): | \$ 1,780K |
| Total: | \$11,072K |

Duration of IRP

Year of IRP Inception: 1987

Year of IRP RIP/RC: 2006/2011

Year of IRP Completion including Long-term Management (LTM): 2036

IRP Contamination Assessment

Assessment Overview:

Three IRP sites are active (FTSH-26, 29, 30 which includes Landfills 2, 3, 4A, 4B, 5, 6, 7, 8A, 8B, 10 and 12.)

Cleanup at Fort Sam Houston began in 1987. DOD initiated the Defense Environmental Restoration Program in an effort to address the widespread contamination found throughout the DOD facilities. In support of this effort, Fort Sam Houston (FSH) was identified as containing restoration sites that required cleanup actions.

There were a total of 26 sites that were identified as requiring a preliminary assessment/site investigation. Contamination at these sites included, but not limited to, metals contamination at a pistol range, hydrocarbon contamination at various underground storage tank locations, POL contamination at maintenance facilities, and buildings contaminated with Polychlorinated Biphenyls (PCB) and pesticides. None of the contaminated sites at FSH produced off-post contamination.

The Texas Commission on Environmental Quality (TCEQ) is the primary regulatory agencies that have authority for approving all cleanup actions at FSH. The TCEQ is also authorized to issue final closure reports for any site that has achieved closure under their rules and regulations. FSH currently has not established a Restoration Advisory Board (RAB). In the past, FSH has sought interest in establishing a RAB, but the interest throughout the community has not been present.

Since the inception of the restoration program at FSH, there have been 23 sites that have achieved a response complete, with 11 sites actually requiring a remedial action. Therefore there remain 3 sites that are still active in the restoration program. These sites include FTSH-26, FTSH-29, and FTSH-30 and all of the sites are abandoned landfills. These sites are currently at the RI/FS phase and an Affected Property Assessment Report (APAR) has been completed for each site. The APAR was submitted to the TCEQ for review and approval on July 2005.

Cleanup Exit Strategy:

FTSH-26 (landfills 8A, 8B 10 & 12): Landfill 8A was declassified as a landfill by TCEQ on October 2004. Landfill 8B contains UXO that will be recommended to remain in place. The APAR for this landfill has been prepared in combination with landfills from site FTSH-29 and FTSH-30. Landfills 10 and 12 were included in a separate APAR. The APAR was approved by the TCEQ with a recommendation of no further action. The monitoring wells have been plugged and abandoned. As a final requirement, the property where these landfills are located will be transferred to the Veterans Affairs Administration for the projected expansion of FSH's cemetery.

FTSH-29 (landfills 4A, 6 & 7): Landfills 4A is adjacent to the FSH golf course along Salado Creek. Landfills 6 & 7 are also located along Salado Creek with major erosion control issues due to steep drop offs at the creek. These landfills contain mostly domestic waste and construction debris. An APAR was submitted to TCEQ in combination with FTSH-30

IRP Contamination Assessment

and landfill 8B. The APAR recommends closure in place with erosion control measures and fencing. Future requirements will include LTM.

FTSH-30 (Landfills 2, 3, 4B & 5): Landfills 2, 3, 4B & 5 are adjacent to the FSH golf course along Salado Creek. These landfills contain medical waste in addition to domestic and construction debris. An APAR was submitted to TCEQ in combination with FTSH-29 and landfill 8B. The APAR recommends closure in place with the installation of a consolidated landfill cap primarily to contain the medical waste and erosion control measures. Future requirements will include LTM with groundwater monitoring, upkeep of the landfill cap and erosion control maintenance.

1982

- Installation Assessment of For Sam Houston, Texas and Sub-installations. Prepared by Environmental Science & Engineering, Inc.

1985

- Hydrogeologic Study. Prepared by AEHA.

1989

- Site Assessment Report, UST Area - Building 330. Prepared by Geo-Marine, Inc.

1990

- Confirmation Study at the Pesticide Storage Building (Building 1134). Prepared by O'Brien & Gere Engineers, Inc.

1991

- Site Assessment at Transportation Motor Pool. Prepared by Engineering-Science, Inc

1992

- Draft Report Environmental Site Survey Building 1874. Prepared by Engineering-Science. Inc.
- Contamination Assessment Study, Soil Remediation Facility Site - Building 3824. Prepared by Engineering-Science. Inc.

1994

- Oil/Grease Trap Site Sampling and Evaluation Report. Prepared by Engineering-Science. Inc.
- Oil and Hazardous Substances Emergency Contingency Plan. Prepared by Engineering-Science. Inc.

1995

- Assessment of Storage Pad for Polychlorinated Biphenyls Building 1171. Prepared by EA Engineering, Science, and Technology.
- Assessment for Mercury at Water Treatment Plant Building 2194. Prepared by EA Engineering, Science, and Technology.
- Building 4226 Evaluation. Prepared by EA Engineering, Science, and Technology.
- Preliminary Assessment Screening Medical Incinerator. Prepared by EA Engineering, Science, and Technology.
- Fort Sam Houston and Camp Bullis Landfill Assessment Report. Prepared by EA Engineering, Science, and Technology.
- Preliminary Assessment Screening 2500 Block Environmental Compliance Support Project. Prepared by EA Engineering, Science, and Technology.
- Assessment of Oil/Water Separator Needs at Ft Sam Houston PQL Sites. Prepared by EA Engineering, Science, and Technology.
- Pollution Prevention Plan. Prepared by Mariah Associates, Inc.

1996

- Work Plan for Groundwater Monitoring at Fort Sam Houston. Prepared by Earth Technology, Inc.
- Preliminary Assessment Screening Report for Pershing Firing Range. Prepared by TRC Mariah Associates Inc.

1998

- Facility-Wide Preliminary Assessment/Site Inspection. Prepared by R.F. Weston.
- Final Site Specific Field Sampling and Analysis Plan, Pershing Firing Range Remediation. Prepared by IT/OHM Remediation Service Corporation.

1999

- Final, Remedial Action Work Plan, Pershing Firing Range Remediation. Prepared by IT/OHM Remediation Service Corporation.
- Closure of <90 Day Hazardous Waste Site Assessment Closure Site Investigation Report. Prepared by R.F. Weston.
- Final Remedial Action Report for Soil Removal at Pershing Firing Range. Prepared by IT/OHM Remediation Service Corporation.

2000

- Field Summary Report Landfill 10 Remediation. Prepared by IT/OHM Remediation Service Corporation.
- Field Summary Report Landfill 12 Remediation. Prepared by IT/OHM Remediation Service Corporation.
- Draft Affected Property Assessment Report Landfill 8B (EOD Area). Prepared by IT/OHM Remediation Service Corporation.
- Exploratory Investigations Final Summary Report Landfills 2, 3, 4A, 4B, 5, 6, 7, and 8A. Prepared by IT/OHM Remediation Service Corporation.

2001

- Additional Confirmation Sampling Report Addendum to Remedial Action Report Soil Removal Pershing Firing Range Remediation. Prepared by IT/OHM Remediation Service Corporation.
- Final Affected Property Assessment Report Landfill 12. Prepared by IT/OHM Remediation Service Corporation.
- Final Affected Property Assessment Report Landfill 10. Prepared by IT/OHM Remediation Service Corporation.
- Draft Self-Implementation Notice and Draft Field Summary Report Addendum for Landfill 12. Prepared by IT/OHM Remediation Service Corporation.
- Draft Self-Implementation Notice and Draft Field Summary Report Addendum for Landfill 10. Prepared by IT/OHM Remediation Service Corporation.

2002

- Data Summary Report Groundwater Monitoring Results Landfills 2, 3, 4A 4B, and 5. Prepared by IT/OHM Remediation Service Corporation.

2004

- Work Plan for Post-Wide Metals Background Study at Fort Sam Houston. Prepared by Shaw Environmental.
- Landfill 8A Declassification Memorandum. Prepared by Shaw Environmental
- Landfill 10 and 12 Groundwater Yield Testing Memorandum. Prepared by Shaw Environmental

2005

- Affected Property Assessment Report Landfill 10. Prepared by Shaw Environmental.
- Affected Property Assessment Report Landfill 12. Prepared by Shaw Environmental.
- Affected Property Assessment Report Landfills 2, 3,4A, 4B, 5, 6, 7, and 8B. Prepared by Shaw Environmental.
- Post-Wide Metals Background Study Report. Prepared by Shaw Environmental.

FORT SAM HOUSTON

Installation Restoration Program Site Descriptions

LANDFILLS 8A, 8B, 10, 12 (PAGE 1 OF 4)**SITE DESCRIPTION**

This site is comprised of 4 individual landfills that are located throughout the eastern to the east-central portion of FSH. They include Landfills 8A, 8B, 10, and 12. These landfills were once used for disposal of unknown waste, as well as domestic waste, construction debris, and organic debris.

Landfill 8A has been declassified from landfill status and will be referred to the MMRP for assessment of the old Pershing Firing Range located at the site.

See following pages for individual landfill site descriptions.

LANDFILL 8A

Landfill 8A is located within the eastern portion of FTSH and is currently designated under FTSH-26 in AEDB-R. This landfill is currently located beneath the north end of the new BAMC parking lot. It is estimated to be 6.5 acres in size. This cover and compact landfill is reported to have received construction debris into the 1970s.

A landfill assessment was performed in 1994 and 1995 that included surface and subsurface soil sampling, and monitoring well installation. Metals were detected in surface soil samples at concentrations above maximum background. Subsequently, groundwater sampling was performed which revealed metals above the MCL.

In June 2000, 12 soil borings were installed to provide sufficient data to define the approximate limits of the landfill and to determine the characteristics of the waste.

On January 25, 2001, FSH received a TCEQ response letter recommending further investigation and reporting. Only one of 12 borings drilled found measurable quantities of groundwater.

TCEQ verbally agreed that NFA was acceptable in a February 2004 meeting. In August 2004, FSH submitted a technical memorandum documenting evidence that waste disposal activities did not occur on a large scale at landfill 8A. The memo requested declassification of the site as a landfill.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Medium

CONTAMINANTS OF CONCERN:
Metals, SVOCs, UXO

MEDIA OF CONCERN: Soil,
Groundwater, Surface Water

| PHASES | Start | End |
|--------------------|---------------------|---------------|
| PA | 198601 | 198701 |
| SI | 198601 | 198701 |
| RI/FS | 199505 | 200503 |
| RD | 200506 | 200607 |
| RA(C) | 200510 | 200609 |
| RA(O) | 200609 | 201109 |
| LTM | 201109 | 203609 |

RIP: 200602

RC: 201109

FTSH-26

LANDFILLS 8A, 8B, 10, 12 (PAGE 2 OF 4)

LANDFILL 8A (cont.)

On October 1, 2004 FSH received concurrence from the TCEQ with the declassification of Landfill 8A. Three groundwater monitoring wells were plugged and abandoned in September 2005. Any further investigation will be conducted under MMRP. This site has been identified as MMRP site and is referred as the FTSH-008-R-01 Old Pershing Range. All further cleanup actions will be managed under the MMRP.

LANDFILL 8B

Landfill 8B is located within the eastern portion of FTSH and is currently designated under FTSH-26 in AEDB-R. This landfill is also known as the EOD area at the Pershing Firing Range (FTSH-13) and is located due east of the former firing range. This landfill is approximately 4 acres in size.

This cover and compact landfill is reported to have received construction debris, and potentially exploded and unexploded ordnance during the 1970s.

A landfill assessment was performed in 1994 and 1995 that included subsurface soil sampling and monitoring well installation. Metals were detected at concentrations above maximum background. Subsequently, groundwater sampling was performed which revealed metals above the MCL.

In 1996, a preliminary assessment screening (PAS) was performed at this site and identified that SVOCs and metal concentrations in the soil were above protective concentration levels. In 1999, a UXO and geophysical survey was performed which identified potentially explosive debris.

Site characterization fieldwork by way of exploratory trenching was completed in June 2000 and an Affected Property Assessment Report (APAR) was submitted in December 2000, recommending a future RA (removal). Further evaluation, however, is expected to show that the site does not pose a significant environmental risk. This, coupled with the potential UXO hazard, has led to a reassessment of the need for any removal.

A post-wide metals background study (MBS) was performed in late 2004. Two additional monitoring wells were installed to improve delineation and gradient definition. Samples collected from all wells in October 2004 showed no Contaminants of Concern (COC) exceeding the critical protective concentration limits (PCLs). A combined Affected Property Assessment Report (APAR) for landfills 2, 3, 4A, 4B, 5, 6, 7, and 8B was prepared and submitted to the TCEQ in July 2005. TCEQ provided comments on the APAR in October 2005. Response to comments were submitted in February 2006.

LANDFILL 10

Landfill 10 is located within the northeastern portion of FTSH and is currently designated under FTSH-26 in AEDB-R. This landfill was located east-southeast of the national cemetery. This landfill was approximately 10 acres in size. This covered, surface-dump

LANDFILLS 8A, 8B, 10, 12 (PAGE 3 OF 4)**LANDFILL 10 (cont.)**

landfill contained construction and cemetery debris. It is unknown as to when this surface dump was in use.

A landfill assessment was performed in 1994 and 1995 that included subsurface soil sampling and monitoring well installation. Metals were detected in at concentrations above maximum background. Subsequently, groundwater sampling was performed which revealed metals above the MCL.

A removal action was performed between November of 1999 and February 2000. The final report was submitted to the TCEQ in October 2000. TCEQ review comments to the field summary report were sent to FSH on January 11, 2001, requiring additional investigation and reporting. Confirmation sampling was performed in May 2001. An APAR recommending NFA was prepared and submitted to TCEQ on November 5, 2001. TCEQ disagreed with the classification of groundwater as a class 3 resource (not usable for potable water supply). Further testing indicates the groundwater was a class 2 resource.

The APAR was revised to reflect the change in classification and the associated PCLs and resubmitted to the TCEQ on February 18, 2005. This report approved by the TCEQ on April 21, 2005 with the condition that Landfills 10 and 12 be deed recorded. The deed recordation for the landfills, to include land use controls, was performed on July 15, 2005 to complete the closure process. Four groundwater monitoring wells were plugged and abandoned in September 2005.

LANDFILL 12

Landfill 12 located within the northeastern portion of FTSH and is currently designated under FTSH-26 in AEDB-R. This landfill is approximately 1 acre in size. This landfill is reported to be an area fill with no control and received construction debris and domestic refuse. It is believed that this area was used during the 1950s.

A landfill assessment was performed in 1994 and 1995 that included soil gas and geophysical surveys, surface soil sampling and monitoring well installation and sampling. Minimal concentrations of metals were detected at above maximum background. Subsequently, groundwater sampling was performed, which revealed metals above the MCL.

A removal action was performed between February and March 2000. The final report was submitted to the TCEQ in October 2000.

TCEQ review comments to the Field Summary Report were sent to FSH on January 10, 2001, requiring additional information to be submitted. An APAR recommending NFA was prepared and submitted to TCEQ on November 5, 2001. The TCEQ disagreed with the classification of the aquifer as a class 3 groundwater source and therefore did not approve the APAR.

LANDFILLS 8A, 8B, 10, 12 (PAGE 4 OF 4)**LANDFILL 12 (cont.)**

The APAR was revised to reflect the change in classification and the associated PCLs and resubmitted to the TCEQ on February 18, 2005. This report approved by the TCEQ on April 21, 2005 with the condition that Landfills 10 and 12 be deed recorded. The deed recordation for the landfills, to include land use controls, was performed on July 15, 2005 to complete the closure process. Five groundwater monitoring wells were plugged and abandoned in September 2005.

CLEANUP STRATEGY

No further action is required for Landfills 10 and 12. Long-term management will be proposed for Landfill 8B.

See following pages for site cleanup strategies for the individual landfills.

LANDFILL 8B

Data from the investigations performed will be forwarded to the MMRP for further evaluation. The Affected Property Assessment Report (APAR) has been submitted with recommendation for Remedy Standard B closure (waste left in place) with long-term management. Response Action Plan (RAP) will be required to document planned monitoring and maintenance activities along with the proposed land use controls (fence and signage) notification language.

Five year reviews will be required through the duration of the LTM (FY15).

LANDFILL 10

No further action is required for Landfill 10.

LANDFILL 12

No further action is required for Landfill 12.

LANDFILLS 4A, 6 AND 7 (PAGE 1 OF 3)

SITE DESCRIPTION

This site is comprised of 3 individual landfills that are located throughout the eastern to the east-central portion of FSH. They include Landfills 4A, 6, and 7. These landfills were once used for disposal of unknown waste, as well as domestic waste, construction debris, and organic debris.

LANDFILL 4A

Landfill 4A is located within the east central portion of FTSH. The AEDB-R designation changed from FTSH-26 to FTSH-29. This landfill is located north and west of Salado Creek which also separates it from Landfill 4B. It is approximately 14 acres in size. This area-fill landfill is reported to have received construction debris from 1960 to until approximately 1975.

A landfill assessment was performed in 1994 and 1995 that included geophysical and soil gas surveys, surface and subsurface soil sampling, and monitoring well installation. Metals and SVOCs were detected in surface soil samples at concentrations above maximum background.

Subsequently, groundwater sampling was performed in October 2004 which revealed metals above the MCL. Post-wide metals background concentrations were established in January 2005, and the report was approved by the TCEQ on April 7, 2005.

Exploratory trenching was completed in June 2000 for remedial design purposes. In August 2000, measures were taken to control erosion. Groundwater samples collected in October 2004 indicated that lead and arsenic concentrations exceeded the PCLs at one location adjacent to Salado Creek. The results have been included in the Combined APAR which was reviewed by the TCEQ. Response to comments was submitted in February 2006.

LANDFILL 6

Landfill 6 is located within the south-eastern portion of FTSH. The AEDB-R designation changed from FTSH-26 to FTSH-29. This landfill is located west of Salado Creek and east of Garden Avenue. The landfill is estimated to be 23 acres in size. This trench and fill landfill is reported to have received domestic, construction, incinerator residue, and debris from the mid-1950s until 1973.

STATUS

REGULATORY DRIVER:
CERCLA, Clean Water Act

RRSE: Medium

CONTAMINANTS OF CONCERN:
Metals, SVOCs

MEDIA OF CONCERN: Soil,
Sediment, Groundwater

| PHASES | Start | End |
|--------------------|---------------------|---------------|
| PA..... | 199409 | 199512 |
| SI | 199409 | 199512 |
| RI/FS | 199603 | 200504 |
| RD | 200506 | 200607 |
| RA(C)..... | 200608 | 200609 |
| RA(O) | 200609 | 201109 |
| LTM | 201109 | 203609 |

RIP: 200609

RC: 201109

FTSH-29

LANDFILLS 4A, 6 AND 7 (PAGE 2 OF 3)

LANDFILL 6 (cont.)

A landfill assessment was performed in 1994 and 1995 that included a geophysical and soil gas surveys, surface and subsurface soil sampling, and monitoring well installation. Metals and SVOCs were detected in four surface soil samples and VOCs in one subsurface soil sample, at concentrations above maximum background. Subsequently, groundwater sampling was performed, which revealed metals above the MCL. Post-wide metals background concentrations were established in January 2005, and the report was approved by the TCEQ on April 7, 2005.

Exploratory trenching was completed in June 2000 for remedial design purposes. In August 2000, measures were taken to control erosion. Groundwater samples collected in October 2004 indicated the presence of lead concentrations exceeding the PCL in two monitoring wells along Salado Creek along with minor erosion issues. The results have been included in the Combined APAR and have been reviewed by the TCEQ. Response to comments was submitted in February 2006.

LANDFILL 7

Landfill 7 is located within the south-eastern portion of FTSH. The AEDB-R designation changed from FTSH-26 to FTSH-29. This landfill is located west of Salado Creek and east of Garden Avenue. An unnamed tributary of Salado Creek separates Landfill 7 from Landfill 6. The landfill is estimated to be 22 acres in size. This trench and fill landfill is reported to have received domestic, construction, organic material and chemical, debris from the mid-1950s until 1979. This site is currently being used to store plant mulch.

A landfill assessment was performed in 1994 and 1995 that included geophysical and soil gas surveys, surface and subsurface soil sampling, and monitoring well installation. Metals and SVOCs were detected in surface soil samples at concentrations above maximum background. Subsequently, groundwater sampling was performed, which revealed metals above the MCL. Post-wide metals background concentrations were established in January 2005, and the report was approved by the TCEQ on April 7, 2005.

Exploratory trenching was completed in June 2000 for remedial design purposes. In August 2000, surface debris was removed and measures were taken to control erosion. In 2004 erosion of the western end of the landfill and the presence of exposed debris were noted during sampling. Samples collected in October 2004 revealed the presence of lead in groundwater at concentrations exceeding the PCL. The results have been included in the Combined APAR and have been reviewed by the TCEQ. Response to comments was submitted in February 2006.

LANDFILLS 4A, 6 AND 7 (PAGE 3 OF 3)**CLEANUP STRATEGY****LANDFILL 4A**

The Affected Property Assessment Report (APAR) that was submitted to the TCEQ on August 31, 2005 recommended a Remedy Standard B closure (waste left in place) with long-term management. Response Action Plan (RAP) will be required to document planned monitoring and maintenance activities along with the proposed land use controls notification language. Annual groundwater sampling will be conducted to verify the consistency of lead and arsenic concentrations. No remedial action is likely to be required.

LANDFILL 6

The Affected Property Assessment Report (APAR) that was submitted to the TCEQ on August 31, 2005 recommended a Remedy Standard B closure (waste left in place) with long-term management. Response Action Plan (RAP) will be required to document planned monitoring and maintenance activities along with the proposed land use controls notification language. The presumed remedy is a remedy standard B closure including LTM, with minor erosion repair and control along Salado Creek, and LUC notification.

Annual groundwater sampling will be conducted to verify the consistency of lead and arsenic concentrations. No remedial action is likely to be required.

LANDFILL 7

The Affected Property Assessment Report (APAR) that was submitted to the TCEQ on August 31, 2005 recommended a Remedy Standard B closure (waste left in place) with long-term management. Response Action Plan (RAP) will be required to document planned monitoring and maintenance activities along with the proposed land use controls notification language. The presumed remedy is a remedy standard B closure including LTM, with erosion repair and control along Salado Creek, and LUC notification.

Annual groundwater sampling will be conducted to verify the consistency of lead and arsenic concentrations. No remedial action is likely to be required.

LANDFILLS 2, 3, 4B, AND 5 (PAGE 1 OF 3)**SITE DESCRIPTION**

This site is comprised of 4 individual landfills that are located throughout the eastern to the east-central portion of FSH. They include Landfills 2, 3, 4B, and 5. The 4 landfills cover ~43 acres. These landfills were once used for disposal of unknown waste, as well as domestic waste, construction debris, medical waste, and organic debris.

See following pages for individual landfill site descriptions.

Exposed debris is found over most of the site.

All landfills in FTSH-30 are covered by the combined APAR which was submitted to the TCEQ. Because all of these landfills are immediately adjacent to one another with no clear boundary between them, they will be treated as one unit for determination of a remedy and preparation of a RAP.

Post-wide metals background concentrations were established in January 2005, and the report was approved by the TCEQ on April 7, 2005.

The Affected Property Assessment Report (APAR) that was submitted to the TCEQ on August 31, 2005 recommended a Remedy Standard B closure (waste left in place) with long-term management. Response Action Plan (RAP) will be required to document planned monitoring and maintenance activities along with the proposed land use controls notification language.

LANDFILL 2

Landfill 2 is located within the east central portion of FSH in the Salado Creek floodplain. The AEDB-R designation changed from FTSH-26 to FTSH-30. Its border with Landfill 3 is essentially indistinguishable. It is estimated to be approximately 6 acres in size. This trench and fill landfill is reported to have received both domestic, medical waste, and construction debris from about 1954 until 1979.

A landfill assessment was performed in 1994 and 1995 that included a geophysical survey, surface and subsurface soil sampling, and monitoring well installation. Metals and TPH were detected in three surface soil samples at concentrations above maximum background. Subsequently, groundwater sampling was performed in October 2004, which

STATUS

REGULATORY DRIVER: CERCLA, Clean Water Act

RRSE: Medium

CONTAMINANTS OF CONCERN: Metals, POL, SVOCs, Medical Waste

MEDIA OF CONCERN: Surface Water, Soil, Groundwater

| PHASES | Start | End |
|---------------|--------------|------------|
| PA | 199409..... | 199512 |
| SI..... | 199409..... | 199512 |
| RI/FS | 199603..... | 200504 |
| RD | 200506..... | 200607 |
| RA(C) | 200510..... | 200702 |
| RA(O) | 200703..... | 201111 |
| LTM | 201111..... | 204111 |

RIP: 200702

RC: 201111

LANDFILLS 2, 3, 4B, AND 5 (PAGE 2 OF 3)**LANDFILL 2 (cont.)**

revealed metals above the MCL.

Exploratory trenching was completed in June 2000 for remedial investigation and design purposes.

Groundwater sampling for MW-0201 conducted in October 2004 was included in the combined APAR. No concentrations exceeding the PCLs were detected.

LANDFILL 3

Landfill 3 is located within the east central portion of FTSH in the Salado Creek floodplain. The AEDB-R designation changed from FTSH-26 to FTSH-30. It is approximately 3.3 acres in size, however, the exact size is unknown because the boundary between it and Landfill 2 is indistinguishable. This trench and fill landfill is reported to have received both domestic, medical waste, and construction debris until 1979.

A landfill assessment was performed in 1994 and 1995 that included a geophysical survey, surface and subsurface soil sampling, and monitoring well installation. Metals and TPH were detected in three surface soil samples at concentrations above maximum background. Groundwater sampling was performed, which revealed metals above the MCL.

Exploratory trenching was completed in June 2000 for remedial investigation and design purposes.

Groundwater concentrations exceeding the PCL for lead and arsenic were detected in samples collected in October 2004. The results were included in the Combined APAR.

LANDFILL 4B

Landfill 4B is located within the east central portion of FTSH in the Salado Creek floodplain. The AEDB-R designation changed from FTSH-26 to FTSH-30. It is approximately 15 acres in size. This area-fill landfill is reported to have received construction debris and medical waste from 1960 to approximately 1975.

A landfill assessment was performed in 1994 and 1995 that included geophysical and soil gas surveys, surface and subsurface soil sampling, and monitoring well installation. Metals and SVOCs were detected in two surface soil samples at concentrations above maximum background. Subsequently, groundwater sampling was performed which revealed metals above the MCL. Exploratory trenching was completed in June 2000 for remedial investigation and design purposes.

Two additional wells were installed and sampled in October 2004. Arsenic was detected at concentrations exceeding the PCL.

LANDFILLS 2, 3, 4B, AND 5 (PAGE 3 OF 3)**LANDFILL 5**

Landfill 5 is located within the east central portion of FTSH in the Salado Creek floodplain and was designated under FTSH-26 in AEDB-R, and has been re-designation to FTSH-30. The landfill is estimated to be 19 acres in size. This trench and fill landfill is reported to have received domestic, construction, and medical waste debris from 1953 until 1975. A landfill assessment was performed in 1994 and 1995 that included a geophysical and soil gas surveys, surface and subsurface soil sampling, and monitoring well installation. Metals, SVOCs, and TPH constituents were detected in four surface soil samples at concentrations above maximum background. Subsequently, groundwater sampling was performed which revealed metals above the MCL. Exploratory trenching was completed in June 2000 for remedial design purposes. One new well was installed in October 2004 and one existing well was replaced due to damage. No concentrations exceeding the PCLs were detected in groundwater samples collected in October 2004.

CLEANUP STRATEGY

The following strategy will be used at all of the sites (landfill 2, 3, 4B, and 5) listed under FTSH-30:

In FY06, the design of a 2-foot soil cover over ~ 43 acres will be completed as part of the RAP. The construction of the soil cover and erosion control measures along Salado Creek will be conducted in FY07. The maintenance of erosion control measures and groundwater monitoring will continue for the duration of the LTM phase for this project.

Remedy standard B closure with LUC and LTM is the presumed remedy. Periodic cover maintenance and groundwater sampling will be necessary.

IRP No Further Action Sites Summary

| AEDB-R# | Site Title | Documentation/Reason for NFA | NFA Date |
|---------|---|---|----------|
| FTSH-01 | MOTOR POOL (BUILDINGS 2510, 2311, 2512) | Study Completed. No cleanup required. | 198702 |
| FTSH-02 | TRANS BR MOTOR POOL | Site still active. Not eligible for IRP | 198901 |
| FTSH-03 | TEXAS NG MOTOR POOL (BUILDING 3451) | Site still active. Not eligible for IRP | 198901 |
| FTSH-04 | USAR VEHICLE MAINT AREA (BUILDING 1522) | Site still active. Not eligible for IRP | 198901 |
| FTSH-05 | HELIPORT | Site still active. Not eligible for IRP | 198901 |
| FTSH-06 | PARKERIZATION (BUILDING 371) | All required cleanup completed. | 199410 |
| FTSH-07 | PRINTING (BUILDING 230) | All required cleanup completed. | 199309 |
| FTSH-08 | PHOTO LAB (BLDG 2000, 1031, 2376, 1450) | Study Completed. No cleanup required. | 198901 |
| FTSH-10 | LAB OPS (BUILDING 2840, 2841, 2630, 2657) | Site still active. Not eligible for IRP | 198901 |
| FTSH-11 | LAB OPS (BUILDING 2653, 2354, 2655, 2375) | Study Completed. No cleanup required. | 198901 |
| FTSH-12 | RANGES (INDOOR, BUILDING 605A, 606A) | Site still active. Not eligible for IRP | 198901 |
| FTSH-13 | PERSHING RANGE (PISTOL), BLDG 3500 | Awaiting final approval from TCEQ. Future LTM may be required. | 200303 |
| FTSH-14 | PESTICIDE STORAGE (BLDG 1874) | All required cleanup completed. | 199508 |
| FTSH-15 | PCB STORAGE (BLDG 1171) | All required cleanup completed. | 199407 |
| FTSH-17 | RAD WASTE STGE (BLDG 238, 1000, 1029, 1126) | Study Completed. No cleanup required. | 198901 |
| FTSH-18 | RAD WASTE STORAGE (BLDG 2376, 2630, 2653) | Study Completed. No cleanup required. | 198901 |
| FTSH-19 | FUEL STORAGE (BLDG 16, 1000, 2190) | No contamination found on site. | 198901 |
| FTSH-20 | FUEL STORAGE (BLDG 2380, 2428, 2429) | All required cleanup completed. Remediation accomplished with non-DEFA funding. | 199201 |
| FTSH-21 | FUEL STORAGE (BLDG 3520, 2912, 3002, 3880) | All required cleanup completed. Remediation accomplished with non-DEFA funding. | 199201 |

IRP No Further Action Sites Summary (cont.)

| AEDB-R# | Site Title | Documentation/Reason for NFA | NFA Date |
|---------|---|---|----------|
| FTSH-22 | FUEL STORAGE (BLDG 1147, 1148, 1384, 1982) | All required cleanup completed. Remediation accomplished with non-DERA funding. | 199201 |
| FTSH-23 | FUEL STORAGE (BLDG 2610) | All required cleanup completed. Remediation accomplished with non-DERA funding. | 199409 |
| FTSH-27 | AMMO STGE (BLDG 4112, 4113, 4114, 4124, 4125) | Site still active. Not eligible for IRP | 198701 |
| FTSH-28 | AMMO STORAGE (BUILDING 298) | Study Completed. No cleanup required. | 198701 |

Initiation of IRP: 1980***Past Phase Completion Milestones*****1980**

- Received RCRA Hazardous Waste Part A Permit, November 1980

1982

- Installation Assessment for Ft Sam Houston and Camp Bullis was performed

1984

- Received a letter from the Texas Department of Health on February 3, terminating FSH's interim status

1987

- Inception year of Installation Restoration Program

1989

- Site Assessment Report for Building 330 was prepared
- RA of USTs at FTSH-19, Fuel Storage

1990

- Confirmation study on Pesticide Storage Building 1134.

1991

- Site Assessment at FTSH-02, Transportation Motor Pool

1992

- An environmental site survey was performed at FTSH-14, Building 1874
- Contamination assessment study at Soil Remediation Site, Building 3824
- Completed RA at FTSH-06, Parkerization
- RA of USTs at FTSH-20, FTSH-21 and FTSH-22, Fuel Storage

1993

- RA of USTs and installation of new USTs at FTSH-23, Fuel Storage (Bldg 2610) was performed

1994

- Completed REM/RA on FTSH-06, FTSH-15, and FTSH-23
- Oil and Hazardous Substances Emergency Contingency Plan prepared
- Oil and grease trap sampling and evaluation
- Performed Landfill assessment at Fort Sam Houston and Camp Bullis

1995

- Completed REM/RA on FTSH-14
- Assessment and Evaluation of FTSH-15, PCB Storage Area, the Mercury Spill at the WTP, Hazardous Waste Storage Area Building 4226, Medical Incinerator, 2500 Block buildings, and oil/water separator needs for Ft Sam Houston and PQL sites. Completed and submitted the Fort Sam Houston and Camp Bullis Landfill Assessment Report
- Pollution Prevention Plan submitted
- Began building removals in the 2500 area, FTSH-01

1996

- Groundwater Monitoring and quarterly results report for Ft Sam Houston was prepared
- Preliminary Assessment of the Pershing Firing Range and EOD area

1997

- Performed the Facility-Wide PA/SI
- Radioactive Waste survey performed on FTSH-17 and FTSH-18 buildings

1998

- PA/SI report was finalized and submitted

1999

- Received No Further Remedial Action is planned under Superfund letter dated June 16, 1999
- Completed Remedial Action on FTSH-13, Pershing Firing Range
- UXO and geophysical survey at EOD area, Landfill 8B
- Commenced RA fieldwork at FTSH-26, Landfill 10

2000

- Received a Notice of Deficiency - July 5, 2000, FSH response package dated October 3, 2000
- Received a Notice of Violation – August 18, 2000
- Performed soil sampling at Building 4226 in response to TCEQ letter dated November 29, 2000
- Exploratory trenching was completed in June 2000 for remedial investigation and design purposes on Landfills 2, 3, 4A, 4B, 5, 6, 7 and 8A
- Complete RA fieldwork at FTSH-26, Landfill 10 and 12
- Limited surface debris removal at Landfill 4A and installed erosion control measures at Landfill 6 and 7
- Performed Site Characterization in June 2000 and submitted an APAR in December 2000 on Landfill 8B.

2001

- Submitted the Additional Confirmation Sampling Report Addendum to Remedial Action Report Soil Removal Pershing Firing Range Remediation
- Submitted Draft APAR documents on Landfills 10 and 12 in June 2001

2002

- Submitted Final APAR documents on Landfills 10 and 12 to TCEQ

2004

- Submitted Work Plan for Post-Wide Metals Background Study to TCEQ

2005

- Submitted Final Revised APAR documents on Landfills 10 and 12 to TCEQ.
- Submitted Post-Wide Metals Background Study Report to TCEQ
- Submitted Final APAR documents on Landfills 2, 3, 4A, 4B, 5, 6, 7, and 8B to TCEQ.

Projected ROD/DD Approval Dates: Unknown

Projected Construction Completion: 2006

Estimated Completion Date of IRP (including LTM phase): 2036

FORT SAM HOUSTON IRP SCHEDULE

(Based on current funding)

| AEDB-R# | PHASE | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | FY15+ |
|---------|-------|------|------|------|------|------|------|------|------|--------|
| FTSH-26 | RA(O) | | | | | | | | | |
| | LTM | | | | | | | | | 203609 |
| FTSH-29 | RA(C) | | | | | | | | | |
| | RA(O) | | | | | | | | | |
| | LTM | | | | | | | | | 203609 |
| FTSH-30 | RA(O) | | | | | | | | | |
| | LTM | | | | | | | | | 204111 |

Prior Years Funding

Funding up to FY04: \$5,064K

| Year/Site Information | Expenditures | FY Total |
|-----------------------------------|-----------------|-----------------|
| FY05 | \$4,074K | \$4,074K |
| PRIOR YEAR TOTAL: \$9,138K | | |

Current Year Funding

| Year/Site Information | Expenditures | FY Total |
|---------------------------|----------------|----------------|
| FY06 | \$ 154K | \$ 154K |
| FY06 TOTAL: \$154K | | |

Total Future Requirements: \$1,780K

Total IRP Program Costs: \$11,072K

FORT SAM HOUSTON

Military Munitions Response Program

AEDB-R MMRP Sites/Sites RC: 26/0

AEDB-R Site Types:

| | |
|------------------------------------|-----------------------------|
| 1 Explosive Ordnance Disposal Area | 4 Fire/Crash Training Areas |
| 3 Firing Ranges | 1 Open Burn |
| 15 Small Arms Ranges | 1 Spill Site Area |
| 1 Unexploded Munitions/Ordnance | |

Contaminants of Concern: Metals, MEC/MC

Media of Concern: Groundwater, Soil

Completed REM/IRA/RA: None

Total MMRP Funding:

| | |
|------------------------------|------------------|
| Prior Years (thru FY05): | \$ 0K |
| Current Year (FY06): | \$ 471K |
| Future Requirements (FY07+): | <u>\$60,435K</u> |
| Total: | \$60,906K |

Duration of MMRP:

Year of MMRP Inception: 2002
Year of RA Completion: 2017
Year of MMRP Completion: 2047

MMRP Contamination Assessment

MMRP Contamination Assessment Overview:

Twenty-six MMRP sites have been identified at Fort Sam Houston.

Cleanup Exit Strategy: SI will be completed on all of the sites by February 2007.

2003

- Final US Army Closed, Transferring and Transferred Range/Site Inventory for Fort Sam Houston and Camp Bullis, Texas, engineering-environmental Management, Inc., January

FORT SAM HOUSTON

Military Munitions Response Program Site Descriptions

FTSH-001-R-01

CHEMICAL DEFENSE TRAINING AREA

SITE DESCRIPTION

This is a Multi-use Range/Site with the Potential for Groundwater Contamination. In the late 1930s, three chemical munitions magazines were located on what is now the northern parking lot at the Army Medical Department Center and School (AMEDDC&S), just south of Harry Wurzbach Highway. Some chemical defense exercises (gas mask drills) were conducted in this area before World War II. This 2.69 acre area currently contains medical and office buildings. No information, on specific ordnance types used or UXO responses at this range, was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: Soil removal, groundwater treatment, and UXO clearance followed by ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Moderate Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil,
Groundwater

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C)..... | 201610 | 201709 |
| RA(O) | 201710 | 203209 |
| LTM | 203210 | 204709 |

RIP: 201710

RC: 203209

FTSH-002-R-01

DODD FIELD SMALL ARMS RANGE

SITE DESCRIPTION

This is a Small Arms Range/Site. In 1888, a small arms target range was constructed in the western portion of a parcel of land just north of Fort Sam Houston that would later become Dodd Field. The target butts were located just south of Rittiman Road and east of Harry Wurzbach Highway in an area that is currently the Watkins Terrace family housing area. The contours of the target butts are still portrayed on maps dated 1926 and 1940. The firing points were to the south, with the 600-yard line east of Road S-43 and north of Dashiell road. Use of the range was likely discontinued in 1915 with the construction of barracks, hangars, and a runway for the development of an aviation post that operated until 1917. This closed range is 87.24 acres in size. No information, on specific ordnance types used or UXO responses at this range, was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA | 200203..... | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |

RC: 201309

SITE DESCRIPTION

This is a Multi-use Range/Site with the Potential for Groundwater Contamination. During the mobilization for WWI, this 114.82 acre area was a multi-use area used to train troops for combat. This would have involved the use of grenades (smoke and practice), small arms and artillery simulators and demolitions. Riot control agents were used between the 1960s and 1970s to simulate toxic chemical agents. Through 1997, the area was used for operational readiness training for combat medics that involved aeromedical evacuations and the use of small arms, smoke and simulators.

Development of the area for other purposes began in 1941, when horse stables were constructed in the southwest corner of the site. In 1961, the Charles Kelly Heliport was constructed in the northwest corner of Meade Field. In 1991, a Recreational Vehicle Park was constructed in the northeast corner of the site. No information was found during the record review concerning UXO responses at this site.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: Soil removal, groundwater treatment, and UXO clearance followed by ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Serious Risk

CONTAMINANTS OF CONCERN:
 Metals, MEC/MC

MEDIA OF CONCERN: Soil,
 Groundwater

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |
| RA(O) | 201710 | 203209 |
| LTM | 203210 | 204709 |

RIP: 201710

RC: 203209

FTSH-004-R-01 1926 PISTOL RANGE

SITE DESCRIPTION

This is a Small Arms Range/Site. A 1926 training map shows a pistol range located south of Wilson Street along the extension of Chaffee Road between Building 4193 and 4194 in the former Kelly AFB Annex. The approximate dates of use for this range are 1926 through 1938. No information, on specific ordnance types used or UXO responses at this range, was located during the records review. Warehouses and office buildings are currently located on this former 31.84 acre range.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|---------------|--------------|------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-005-R-01

STAFF POST FIRING RANGE

SITE DESCRIPTION

This is a Small Arms Range/Site. The earliest known small arms firing range on Fort Sam Houston was located in the Staff Post area near the intersection of Wilson Street and Liscom Road. The target butts would have been located near the west end of Building 230. This range was in use from about 1867 to 1887 when troop strength at the installation varied between 80 and 200 soldiers. The former site is approximately 615.1 acres in size. Part of the former firing range contains office buildings, while the rest remains undeveloped. No information on specific ordnance types used or UXO responses at this range was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C)..... | 201610 | 201709 |

RC: 201709

CHEMICAL WARFARE DEMONSTRATION AREA

SITE DESCRIPTION

This is a Multi-use Range/Site. In 1920, a chemical warfare demonstration was conducted in the area between Salado Creek and Garden Street. An unknown number of 4-inch Stokes mortars and 8-inch Livens projectors were fired during the demonstration. The mortars fired thermite and white phosphorus rounds. The Livens projectors fired oil-filled incendiary drums and titanium tetrachloride rounds to simulate mustard gas. The range fan for the 200-yard Rifle Range overlies this site. Total acreage of the area is 128.79 acres, and is currently as a recreation area. No information was found during the record review concerning UXO responses at this site.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: Soil removal, groundwater treatment, and UXO clearance followed by ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: High Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-------------|-------------|--------|
| PA | 200203..... | 200305 |
| SI | 200509..... | 200702 |
| RI/FS | 201110..... | 201209 |
| RD | 201510..... | 201609 |
| RA(C) | 201610..... | 201709 |
| LTM | 201710..... | 204709 |

RC: 201709

FTSH-007-R-01

CLOSED PERSHING FIELD

SITE DESCRIPTION

This is a Multi-use Range/Site. During the mobilization for WWI, this area was a multi-use area used to train troops for combat. This would have involved the use of grenades (smoke and practice), small arms and artillery simulators or demolitions. A 1926 training map depicts a machine gun range at the western end of Pershing Field. Records indicate that from 19 July 1938 to 23 November 1938, the Machine Gun Range was redeveloped as a "1000-inch range" and renamed the Humphrey-Maston Range. During the 1930s, a pistol range was opened just south of the Humphrey-Maston Range in the western end of Pershing Field. The use of the range was discontinued in November 1939. In 1955, the US Modern Pentathlon Training Center moved to Fort Sam Houston. Shortly thereafter, the former pistol range was designated as the Pentathlon Range. This 100.88 acre training area was used from 1917 until approximately 1962. The current Fort Sam Houston Golf Course was constructed over part of this former training area, while other parts of the area were used for landfills from 1953 to 1979, with the rest remaining undeveloped. No information on specific ordnance types used or UXO responses at this range was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: soil and UXO removal and ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Serious Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-------------|--------------|--------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C)..... | 201610 | 201709 |
| LTM | 201710 | 204709 |

RC: 201709

FTSH-008-R-01
OLD PERSHING RANGE

SITE DESCRIPTION

This is a Small Arms Range/Site. This 4.93 acre small arms range was built in 1960 and was used until the replacement range, the New Pershing Range, was built in 1970. The proximity of the National Guard Armory complex, built in 1974, limited the amount and type of training conducted in this area. This former range area is currently the location of Brooke Army Medical Center and office buildings. No information, on specific ordnance types used or UXO responses at this range, was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-------------|--------------|--------|
| PA | 200203..... | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-009-R-01 FIRE TRAINING AREA

SITE DESCRIPTION

This is a Multi-use Range/Site with the Potential for Groundwater Contamination. This 55.36 acre area is part of the land acquired for the construction of Camp Travis in 1917 to prepare for WWI troop build-up; the western boundary of the training area was along the edge of the cantonment barracks. Camp Travis later became part of Fort Sam Houston in 1922. The area was used primarily for small arms training from 1917 to 1945. A "recruit rifle range" was reported to have existed in 1940 towards the east end of the area but its existence could not be verified during the review of available maps and records. The range fan for the former 200-yard rifle range also overlies this area. A fire station, fire training facilities, and softball fields are currently located on a portion of this site. No information, on specific ordnance types used or UXO responses at this range, was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: Soil removal, groundwater treatment, and UXO clearance followed by ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Low Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil,
Groundwater

| PHASES | Start | End |
|-------------|--------------|--------|
| PA..... | 200203 | 200305 |
| SI..... | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |
| RA(O) | 201710 | 203209 |
| LTM | 203210 | 204709 |

RIP: 201710

FTSH-010-R-01 PENTATHLON RANGE-TD

SITE DESCRIPTION

This is a Small Arms Range/Site. This 7.7 acre site is part of the range fan of the former Pentathlon Pistol Range and lies to the east of the current installation boundaries. The Pentathlon Pistol Range was used from approximately 1930 through 1939, and then again from 1955 until approximately 1962. Currently, this area is used for residential areas and undeveloped flood plain. No information, on specific ordnance types used or UXO responses at this range, was located during the records review.

This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1962.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-011-R-01

SALADO CREEK TRAINING AREA

SITE DESCRIPTION

This is a Multi-use Range/Site with the Potential for Groundwater Contamination. In 1917, the area was used for WWI training that included grenades, mortars, and practice bombs from aircraft. From 1946 to 1997, the 45.46 acre Salado Creek Training Area was used for individual training of medical officers and enlisted personnel and unit training; primarily military police, and Army Medical Department organizations. This training would have involved small arms, artillery simulators, smoke and practice grenades and riot control agents. A 1926 training map shows a 200-yard rifle range located on the western edge of the Salado Creek Training Area east of Salado Creek and south of the current bridge over the creek on Binz-Engelman Road. The range is also depicted on site maps dated 1938, 1943 and 1951. This area is currently undeveloped. No information on UXO responses at this range was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: soil removal, groundwater treatment and UXO clearances, followed by ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: High Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil,
Groundwater

| PHASES | Start | End |
|-------------|--------------|--------|
| PA | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS..... | 201110 | 201209 |
| RD..... | 201510 | 201609 |
| RA(C) | 201610 | 201709 |
| RA(O)..... | 201710 | 203209 |
| LTM..... | 203210 | 204709 |

RIP: 201710

FTSH-012-R-01

200-YARD RIFLE RANGE

SITE DESCRIPTION

This is a Small Arms Range/Site. A 1926 training map shows a 200-yard rifle range located in the southern portion of the Salado Creek Training Area east of Salado Creek and the current bridge over the creek on Binz-Engelman Road. The range is also depicted on site maps dated 1938, 1943 and 1951. No information, on specific ordnance types used or UXO responses at this range, was located during the records review. According to available records there is no evidence of the range being used in 1951. The 0.89 acre area is currently an undeveloped area within the floodplain of Salado Creek.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|---------------|--------------|------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-013-R-01

STONEWALL JACKSON FIELD-TD

SITE DESCRIPTION

This is a Multi-use Range/Site. This 76.13 acre site was formerly part of the Stonewall Jackson Field Training Area. During the mobilization for WWI, this area was a multi-use area used to train troops for combat. From 1925 to 1931, the area was also used as a practice bombing range for aircraft flying out of Dodd Field. Black powder practice bombs have been found in Stonewall Jackson Field as recently as 1983. A 1926 Training Map does not depict any training areas within this former area of Stonewall Jackson Field. In 1941, troop barracks were constructed in this area as part of the Dodd Field Recruit Reception Center; barracks are still depicted on a 1956 map. The range fans for the Humphrey-Maston Machine Gun Range and the Stonewall Jackson Field Pistol Range overlay this site. In 1980, 31.68 acres of this site was transferred to the Department of Veterans Affairs for development as a National Cemetery. In 1998, the remaining 45.10 acres of land was also transferred to the Department of Veterans Affairs for further development of the National Cemetery. No information on UXO responses was located during the record review.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: soil and UXO removal and ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Serious Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-------------|-------------|--------|
| PA | 200203..... | 200305 |
| SI | 200509..... | 200702 |
| RI/FS | 201110..... | 201209 |
| RA(C) | 201610..... | 201709 |
| LTM | 201710..... | 204709 |

RC: 201709

FTSH-015-R-01 LANDFILL 8B

SITE DESCRIPTION

This is a Multi-use Range/Site. The landfill (AEDB-R Site FTSH-26), also known as the Explosive Ordnance Disposal area, is approximately 4.86 acres and is located to the east of the Pershing Firing Range. According to the March 2002 Installation Action Plan and the May 2000 Site Characterization Work Plan, it is reported to have received construction debris, and potentially exploded and unexploded ordnance from 1970 to 1985. The area was surface cleared by a UXO team in 1999 and 2000 prior to geophysical surveys being conducted across the site. Only UXO-related items that included hand grenade spoons, one empty M-16 mine casing and expended small arms rounds have been located and removed; no UXO have been detected. The remedial investigation for Landfill 8B has recently been completed under the IRP.

The landfill is currently surrounded with an 8-foot chain link fence topped with barbed wire.

CLEANUP STRATEGY

Additional investigation is planned. UXO clearance and ICs may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Low Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-------------|-------------|--------|
| PA | 200203..... | 200305 |
| SI | 200509..... | 200702 |
| RI/FS | 201110..... | 201209 |
| RD | 201510..... | 201609 |
| RA(C) | 201610..... | 201709 |
| LTM | 201710..... | 204709 |

RC: 201709

FTSH-016-R-01 PISTOL RANGE-TD

SITE DESCRIPTION

This is a Small Arms Range/Site. The Pistol Range-TD is the 36.34 acre section of the original range fan of the Pistol Range that extends past the installation boundary. A 1926 training map and a map dated May 1940 based on 1938 aerial photos depict a pistol range being located in the southeast corner of the Stonewall Jackson Field Training Area. The pistol range does not appear on a map dated July 1943 or any other available historical maps. No information on specific ordnance types used or UXO responses at this range was located during the records review. Currently, the property contains the City of San Antonio Park and residential areas. This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1943.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C)..... | 201610 | 201709 |

RC: 201709

FTSH-017-R-01 STONEWALL JACKSON FIELD

SITE DESCRIPTION

This is a Multi-use Range/Site. During the mobilization for WW I, this 283.78 acre area was a multi-use area used to train troops for combat. From 1925 to 1931, the area was also used as a practice bombing range for aircraft flying out of Dodd Field. Black powder practice bombs have been found at the site as recently as 1983. The training area was also used during WWII for various types of training including the use of practice landmines. The presence of the 4th Army antenna farm in this area in 1947 would have limited the use of the training area as a live-fire training range. A 1926 training map and a map dated May 1940 based on 1938 aerial photos depict a pistol range being located in the southeast corner of the Stonewall Jackson Field Training Area. The pistol range does not appear on a map dated July 1943 or any other available historical maps. No additional information on this pistol range was located during the records review. The range fans for the Humphrey-Maston Machine Gun Range and the Pentathlon Pistol Range also overlay Stonewall Jackson Field Training Area. Parts of this site are currently used for utility/ground improvements and landfills, with the rest remaining undeveloped. No information on UXO responses was located during the record review.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: soil and UXO removal and ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Serious Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C)..... | 201610 | 201709 |
| LTM | 201710 | 204709 |

RC: 201709

FTSH-018-R-01 TRENCH WARFARE COMPLEX

SITE DESCRIPTION

This is a Multi-use Range/Site with the Potential for Groundwater Contamination. Beginning in 1917, this 65.77 acre area was used for combat training during the troop build up for WWI. This training included practice grenades, small arms, rifle grenades, smoke and demolitions. After 1970, training was limited to field training exercises with small arms, simulators, and smoke and riot control agents. Training was further curtailed in the area after 1974 with the construction of the National Guard Armory Complex in the northeast portion of the site. Brooke Army Medical Center and office buildings are currently located on this former training site. No information on UXO responses was located during the record review.

CLEANUP STRATEGY

Additional investigation is planned. RA may include: Soil removal, groundwater treatment, and UXO clearance, followed by ICs.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Moderate Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil,
Groundwater

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C)..... | 201610 | 201709 |
| RA(O) | 201710 | 203209 |
| LTM | 203210 | 204709 |

RIP: 201710

FTSH-019-R-01

1926 PISTOL RANGE-TD

SITE DESCRIPTION

This is a Small Arms Range/Site. The 1926 Pistol Range-TD is the 1.23 acre section of the original range fan of the 1926 Pistol Range that extends past the installation boundary. A 1926 training map shows a pistol range located south of Wilson Street along the extension of Chaffee Road between Building 4193 and 4194 in the former Kelly AFB Annex. The approximate date of use for this range is 1926 through 1938. No information, on specific ordnance types used or UXO responses at this location, was located during the records review.

The property is currently used for railroad right-of-way. This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1938.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-020-R-01

200-YARD RIFLE RANGE-TD

SITE DESCRIPTION

This is a Small Arms Range/Site. The 200 Yard Rifle Range-TD is the 253.22 acre section of the original range fan of the 200 Yard Rifle Range that extends past the installation boundary. A 1926 training map shows a 200-yard rifle range located in the southern portion of the Salado Creek Training Area east of Salado Creek and the current bridge over the creek on Binz-Engelman Road. The range is also depicted on site maps dated 1938, 1943 and 1951. According to available records there is no evidence of the range being used in 1951. No information, on specific ordnance types used or UXO responses at this range, was located during the records review.

This former range is currently used as a residential area and the San Antonio Country Club. This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1951.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|---------------|--------------|------------|
| PA | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-021-R-01

DODD FIELD SMALL ARMS RANGE-TD

SITE DESCRIPTION

This is a Small Arms Range/Site. The Dodd Field Small Arms Range-TD is the 1153.47 acre section of the original range fan of the Dodd Field Small Arms Range that extends past the installation boundary. In 1888, a small arms target range was constructed in the western portion of a parcel of land just north of Fort Sam Houston that would later become Dodd Field. Use of the range was likely discontinued in 1915 with the construction of barracks, hangars, and a runway for the development of an aviation post that operated until 1917. Light commercial development and residential areas are currently located on this site. No information, on specific ordnance types used or UXO responses at this range, was located during the records review.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|---------------|--------------|------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |

RC: 201309

This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1915.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

FTSH-022-R-01

STAFF POST FIRING RANGE-TD

SITE DESCRIPTION

This is a Small Arms Range/Site. The Staff Post Firing Range-TD is the 317.17 acre section of the original range fan of the Staff Post Firing Range that extends past the installation boundary. The earliest known small arms firing range on Fort Sam Houston was located in the Staff Post area near the intersection of Wilson Street and Liscom Road. This range was in use from about 1867 to 1887. This area is currently used for commercial warehouses, railroad and utility right-of-way. No information on specific ordnance types used or UXO responses at this range was located during the records review.

This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1887.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-------------|-------------|--------|
| PA | 200203..... | 200305 |
| SI | 200509..... | 200702 |
| RI/FS | 201110..... | 201209 |
| RD | 201510..... | 201609 |
| RA(C) | 201610..... | 201709 |

RC: 201709

FTSH-023-R-01

STAFF POST FIRING RANGE-TD2

SITE DESCRIPTION

This is a Small Arms Range/Site. The Staff Post Firing Range-TD2 is the 118.9 acre section of the original range fan of the Staff Post Firing Range that extends past the installation boundary. The earliest known small arms firing range on Fort Sam Houston was located in the Staff Post area near the intersection of Wilson Street and Liscom Road. This range was in use from about 1867 to 1887. This area is currently used for residential and commercial activities. No information on specific ordnance types used or UXO responses at this range was located during the records review.

This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1887.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA | 200203..... | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-024-R-01

STAFF POST FIRING RANGE–TD3

SITE DESCRIPTION

This is a Small Arms Range/Site. The Staff Post Firing Range-TD3 is the .79-acre section of the original range fan of the Staff Post Firing Range that extends past the installation boundary. The earliest known small arms firing range on Fort Sam Houston was located in the Staff Post area near the intersection of Wilson Street and Liscom Road. This range was in use from about 1867 to 1887. A residential area is currently located on this property. No information on specific ordnance types used or UXO responses at this range was located during the records review.

This property was never owned by the US Army and is not being considered under the FUDS inventory. US Army use of this property ended in 1887

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

FTSH-025-R-01

200-YARD RIFLE RANGE 2

SITE DESCRIPTION

This is a Small Arms Range/Site. A 1926 training map shows a 200-yard rifle range located in the southern portion of the Salado Creek Training Area east of Salado Creek and the current bridge over the creek on Binz-Engelman Road. The range is also depicted on site maps dated 1938, 1943 and 1951. According to available records there is no evidence of the range being used in 1951. No information, on specific ordnance types used or UXO responses at this range, was located during the records review. This 417.3 acre area currently contains the Post Exchange (PX), Commissary, office buildings, and houses.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-026-R-01

STAFF POST FIRING RANGE 2

SITE DESCRIPTION

This is a Small Arms Range/Site. The Staff Post Firing Range 2 is a 20.44 acre section of the original range fan of the Staff Post Firing Range. The earliest known small arms firing range on Fort Sam Houston was located in the Staff Post area near the intersection of Wilson Street and Liscom Road. The target butts would have been located near the west end of Building 230. This range was in use from about 1867 to 1887.

Office buildings are currently located in this area. No information on specific ordnance types used or UXO responses at this range was located during the records review.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-----------------|---------------------|---------------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

FTSH-027-R-01
PISTOL RANGE

SITE DESCRIPTION

This is a Small Arms Range/Site. The Pistol Range is the 34.89 acre section of the original range fan of the Pistol Range that extends past Stonewall Jackson Field Training Area. A 1926 training map and a map dated May 1940 based on 1938 aerial photos depicts a pistol range being located in the southeast corner of the Stonewall Jackson Field Training Area. The pistol range does not appear on a map dated July 1943 or any other available historical maps. No information on specific ordnance types used or UXO responses at this range was located during the records review. Currently, the property contains the Fort Sam Houston Middle School and High School, a football stadium and a few residential areas.

CLEANUP STRATEGY

Additional investigation is planned. Soil removal may be needed.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Metals, MEC/MC

MEDIA OF CONCERN: Soil

| PHASES | Start | End |
|-------------|--------------|--------|
| PA..... | 200203 | 200305 |
| SI | 200509 | 200702 |
| RI/FS | 201110 | 201209 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC: 201709

Initiation of MMRP: 2002

Past Phase Completion Milestones:

2003

PA - all sites, March

Projected ROD/DD Approval Dates: Unknown

Projected Construction Completion: 2017

Scheduled Five Year Reviews: Unknown

Estimated Completion Date of MMRP (including LTM): 2047

FORT SAM HOUSTON MMRP SCHEDULE

(Based on current funding)

| AEDB-R# | PHASE | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | FY15+ |
|---------------|-------|------|------|------|------|------|------|------|------|--------|
| FTSH-001-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | RA(O) | | | | | | | | | 203209 |
| | LTM | | | | | | | | | 204709 |
| FTSH-002-R-01 | RI/FS | | | | | | | | | |
| FTSH-003-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | RA(O) | | | | | | | | | 203209 |
| | LTM | | | | | | | | | 204709 |
| FTSH-004-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-005-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-006-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | LTM | | | | | | | | | 204709 |
| FTSH-007-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | LTM | | | | | | | | | 204709 |
| FTSH-008-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-009-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | RA(O) | | | | | | | | | 203209 |
| | LTM | | | | | | | | | 204709 |
| FTSH-010-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |

| AEDB-R# | PHASE | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | FY15+ |
|---------------|-------|------|------|------|------|------|------|------|------|--------|
| FTSH-011-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | RA(O) | | | | | | | | | 203209 |
| | LTM | | | | | | | | | 204709 |
| FTSH-012-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-013-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | LTM | | | | | | | | | 204709 |
| FTSH-015-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | LTM | | | | | | | | | 204709 |
| FTSH-016-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-017-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | LTM | | | | | | | | | 204709 |
| FTSH-018-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | RA(O) | | | | | | | | | 203209 |
| | LTM | | | | | | | | | 204709 |
| FTSH-019-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-020-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-021-R-01 | RI/FS | | | | | | | | | 204709 |
| FTSH-022-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |

| AEDB-R# | PHASE | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | FY15+ |
|---------------|-------|------|------|------|------|------|------|------|------|--------|
| FTSH-023-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-024-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-025-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-026-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FTSH-027-R-01 | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |

Prior Years Funding

Funding up to FY04: \$0K

| Year | Site Information | Expenditures | FY Total |
|--|------------------|--------------|----------|
| FY05 | | \$0K | \$0K |
| Total Funding (thru FY05): \$ 25K | | | |

Current Year Funding

| Year | Site Information | Expenditures | FY Total |
|-----------------------------------|------------------|--------------|----------|
| FY06 | SI – all sites | \$471K | \$471K |
| Total Funding FY06: \$471K | | | |

***Total Future Requirements:* \$60,435K**

***Total MMR Program Costs:* \$60,906K**

Community Involvement

Currently there is no organized community involvement for Fort Sam Houston. In the past, the Public Affairs Office, which is the proponent for establishing a RAB, determined that a RAB was not necessary. However, due to recent developments, FSH is evaluating community involvement options and will take the appropriate measures to ensure that it meets CERCLA requirements for public involvement during IRP investigations and cleanup actions.